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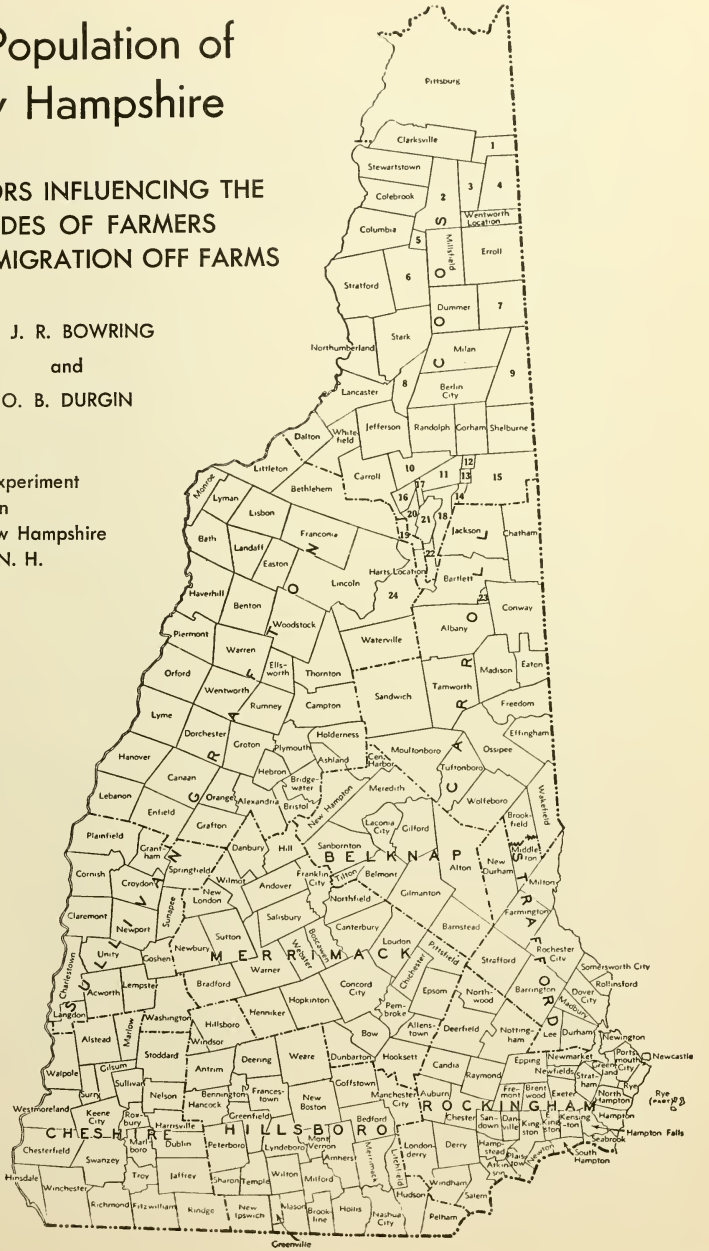
4. FACTORS INFLUENCING THE ATTITUDES OF FARMERS TOWARDS MIGRATION OFF FARMS

By J. R. BOWRING
and
O. B. DURGIN

Agricultural Experiment Station
University of New Hampshire
Durham, N. H.

Station Bulletin 458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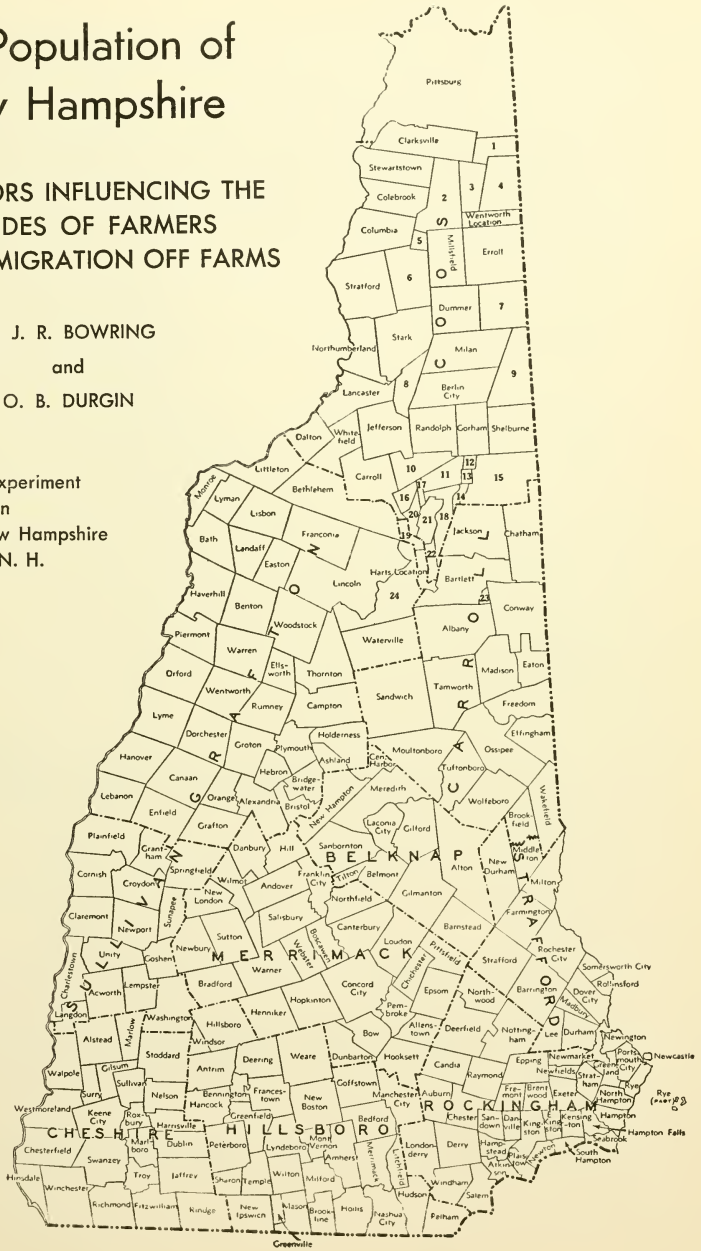
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This study was part of a Northeast Regional Project, NE-31, The Effect of Urban-Industrial Expansion on Northeastern Agriculture; a cooperative study involving agricultural experiment stations in the Northeastern Region and supported in part by regional funds.

This is the fourth in a series of bulletins dealing with the effects of change in the number and location of people in New Hampshire. The previous studies under the heading "The Population of New Hampshire" are:

1. Trends and Characteristics —— Station Bulletin No. 413

2. Migration and Changes in Composition — Station Bulletin No. 425

3. Effects of Migration on the Small New Hampshire Town — Station Bulletin No. 437

These are available on request to the Department of Agricultural Economics, University of New Hampshire, Durham, New Hampshire.

Factors Influencing the Attitudes of Farmers Towards Migration Off Farms

Introduction

A previous study in this series[1] indicated a high rate of migration off farms between 1940 and 1950. There is no evidence that this trend has ceased since that time. This movement off farms is not a mass migration but a movement selective of specific individuals. Some of these individuals move deliberately, others have no choice but to move as dependents of a household head who decides to move.

One of the current suggestions to the solution of the problems of depressed rural areas is to increase non-farm employment for present farm operators. If it were possible to identify the characteristics of persons most likely selected by the migration process, the work of those associated with adjustments in the rural area might be made easier.

However, if the number of non-voluntary migrants, i.e., those moving as dependents, is very large, there should be few if any individual social characteristics distinguishing migrants from non-migrants on an *average* basis, since up to 60% of the movers might well be non-voluntary.

It is the purpose of this study to investigate some of the reasons for the continuous migration of farm people by testing some hypotheses about the selective process in migration off farms. The method followed was to interview existing operating farmers on their attitudes relative to migration, and obtain information on their operations necessary for testing these hypotheses.

Procedure

In cooperation with the County Agricultural Extension Agents and other interested groups familiar with the agriculture of Merrimack and Rockingham counties in New Hampshire, a list of operating farmers was developed. These were classified by estimated net farm income. From this list, samples of farmers from the lowest income groups and from the highest income groups were selected at random for interview. Two hundred and fifty-three farm interview records were analyzed.

The following sections contain statements of hypotheses or preconceived ideas about why farmers would consider leaving their farms. The data of the interviews are then used to support or question these hypotheses.

The data analyzed were divided into two categories of operators: (a) Those who have considered leaving the present farm and (b) those who have not considered leaving the farm. The two counties from which samples were drawn are located in the southern part of New Hampshire where considerable non-farm work is available.

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[1] THE POPULATION OF NEW HAMPSHIRE: 2, *Migration and Changes in Composition*, Agr. Exp. Sta. Bul. 426, p. 9.

As is shown in Table 1, with few exceptions net incomes of operators interviewed were obtained from both farm and non-farm sources. Only members of the highest income group depended entirely on the farm for their income. This combined source of income may well have influenced the operators' attitude toward leaving the farm, although no data are available to prove this.

Table 1. Distribution of Farms by Percent of Net Income From Farming

Net Income (Dollars per Year)	Percent of Net Income from Farming						
	0-50	51-99	100	0-50	51-99	100	Total
	(Percent of Farms)			(Number of Farms)			Number
0- 999	69	8	23	24	3	8	35
1,000- 1,999	30	23	47	15	12	24	51
2,000- 2,999	37	10	53	14	4	20	38
3,000- 3,999	12	30	58	5	12	23	40
4,000- 4,999	24	28	48	5	6	10	21
5,000- 6,999	35	11	54	9	3	14	26
7,000- 8,999	10	22	68	2	4	13	19
9,000-11,999	62	0	38	5	—	3	8
12,000-and over	0	0	100	—	—	6	6
Not available	—	—	—	—	—	—	9
Total				79	44	121	253

A. Income

Hypothesis No. 1, that the lower income farmers would be more likely to consider leaving their farms than the higher income farmers, was not supported. A majority in both income classes showed no inclination to move. The income distribution of the operators who had considered leaving was not significantly different from those who had never considered leaving.[1]

Whether a farmer had considered moving or staying is not related to his level of net income. In other words, a farmer would be just as likely to make the same decision to move off this farm to a farm elsewhere or to enter non-farm employment, or to stay, if his net income were $1,000 as if his net income were $9,000.

B. Age

Hypothesis No. 2, that the age of the operator influenced his attitude towards leaving the farm, was not supported. Age was not significant in differentiating between the group who have considered leaving and the group who had not considered leaving. The findings are given in Table 3.

[1] Tests of significance in this study are limited to Chi-square and significance of difference of normally distributed bi-variate populations.

Table 2. Proportion of Farm Occupants by Net Income Groups of Those Who Have Considered Leaving This Farm and Those Who Have Not

Net Income Group	Have Considered Leaving		Have not Considered Leaving	
Dollars	Percent	No.	Percent	No.
0- 999	14	5	14	30
1,000-1,999	11	4	22	47
2,000-2,999	5	2	18	38
3,000-3,999	33	12	13	28
4,000-4,999	6	2	8	19
5,000-6,999	17	6	8	19
7,000-8,999	8	3	7	16
9,000-and over	6	2	6	12
No answer			4	8
	100	36	100	217

Table 3. Proportion of Farm Occupants by Age Groups of Those Who Have Considered Leaving and Those Who Have Not

Age Group	Have Considered Leaving		Have not Considered Leaving	
Years	Percent	No.	Percent	No.
20-30	3	1	4	9
31-40	19	7	15	32
41-50	14	5	27	58
51-60	39	14	21	46
61-75	25	9	28	60
76-and over	0	0	5	10
Not available	0	0	0	2
	100	36	100	217

Table 4 shows that while the average age for the income groups below $2,000 per year and the groups above $12,000 a year are somewhat higher than for income groups $3,000 up to $9,000 there is no other apparent relationship between income and age. The average age for all farmers is 54.6 years.

C. Education

A third hypothesis was that operators would be more likely to have considered leaving if they had attained college or high school education. There was no significant difference in the years of school attendance between those who have considered leaving (average of 10.3 years) and those who planned to stay (average of 10.7 years of school).

Table 4. Average Age of Farmers by Income Group

Net Income Group	Average Age	
Dollars	Years	No.
0- 999	59.7	35
1,000- 1,999	54.2	51
2,000- 2,999	55.0	40
3,000- 3,999	49.5	40
4,000- 4,999	47.6	21
5,000- 6,999	46.7	26
7,000- 8,999	48.9	19
9,000-11,999	49.0	8
12,000-14,999	55.0	1
15,000-17,999	70.0	2
18,000-19,999	65.0	2
20,000-and over	55.0	1
No answer	—	7
Average	54.6	
Total		253

Table 5. Percent Distribution of Farm Operators Who Had Considered Leaving and Who Had Not Considered Leaving by Years of Formal Education.

Years of Education	Had Considered Leaving		Had Not Considered Leaving	
	Percent	No.	Percent	No.
0- 7	6	2	8	18
8	25	9	21	45
9-11	22	8	19	42
12	28	10	24	51
13-15	19	7	12	25
16	0	0	15	33
No answer	0	0	1	3
	100	36	100	217

There was a high proportion of operators who had received at least 16 years of education but who had not considered leaving their present farm. A large proportion of these operators had attained this education and perhaps experience in another job before moving to the farm, while a smaller number had attained their education as sons of farmers and remained to operate this farm.

There was little difference in the years of formal education experienced by each income group. Those with lower incomes had received as much education on the average as those with higher incomes.

Table 6. Average Years of School Attended by Operators in Relation to the Net Farm Income for 1956

Net Income Group	Average years of School Attended	No.
0- 999	10.4	35
1,000- 1,999	14.0	51
2,000- 2,999	11.5	38
3,000- 3,999	9.8	40
4,000- 4,999	11.4	21
5,000- 6,999	11.5	26
7,000- 8,999	13.6	19
9,000-11,999	12.5	8
12,000-14,999	—	4
15,000-and over	10.1	2
Not available	—	9
		253

D. Farm Improvements

A 4th hypothesis was that farm operators who had not considered leaving would have adopted more improvements and would have increased the size of their operations more than those with a propensity to leave.

To test this hypothesis, information was obtained on growth factors such as number of cows milked, number of layers, number of broilers and value of farm sales between 1945 and 1955. The farms were then rated as to increasing, decreasing, or constant growth. The proportion in each group are given in Table 7.

Table 7. Percentage of Farm Operators Who Had Increased, Decreased or Had Made No Change in the Size of Their Operation During the Previous Two Decades According to Whether They Had Considered Leaving or Not Considered Leaving

Change in Size of Operation	Had Considered Leaving		Had Not Considered Leaving	
	Percent	No.	Percent	No.
Increasing	50	18	40	86
Decreasing	28	10	30	66
Constant	22	8	30	65
Total	100	36	100	217

From this evidence almost the same proportion of operators who had not considered leaving had increased the size of their operations as had those who had considered leaving.

As for the adoption of improvements, both groups had adopted one or more of such practices as overhead grain storage, automatic feeder, antibiotic feeds, commercial phosphate fertilizer, or automatic gutter cleaner. No significant difference was apparent.

Table 8. Percentage of Farm Operators Who Had Adopted No or One or More Improvements During the Previous Two Decades According to Whether They Had or Had Not Considered Leaving

Improvements Adopted	Had Considered Leaving		Had Not Considered Leaving	
	Percent	No.	Percent	No.
0	14	5	23	50
1 or more	86	31	77	167
Average No. of improvements		2.1		1.8

E. Migration of Children

Hypothesis No. 5 was that the children of farmers who had considered leaving would be more likely to leave home than would children from farms where the parents had expressed no intention of leaving.

It was found, however, that the proportion of children over eighteen years of age who had left home was similar for both groups. This was true for male and females.

Table 9. Proportion of Children 18 Years and Over Who Had Left Home to Live Elsewhere

	Operator Considered Leaving		Operator Had Not Considered Leaving	
	No.	Percent	No.	Percent
Males over 18	27		178	
Have left home	17	63	124	70
Females over 18	16		143	
Have left home	14	88	141	99

A larger proportion of females had left the home farm than males, as to be expected, but this decision to leave by males was apparently not influenced significantly by the attitude of the head of the family towards leaving the farm.

The average number of children born to families was 2.4 for those who had considered leaving and 2.6 for those who had not considered leaving.

F. Community Ties

A sixth hypothesis was that the desire to move is less when community ties, as represented by participation in church and farm organizations, are strong. In order to test this hypothesis farmers interviewed were asked about par-

ticipation in various community groups. Their answers showed there was no significant difference in participation between those who had considered moving and those who had never considered moving from their present location.

Table 10. Proportion of Farm Operators Recorded Participating in Community Affairs in Relation to Their Attitude Towards Leaving the Farm

Community Organization	Considered Leaving			Not Considered Leaving		
	No.	Participants	Percent Participation	No.	Participants	Percent Participation
Church	36	25	69	214	167	78
Farmer	36	26	72	213	155	73
School	36	9	25	214	53	25
Public office	36	4	11	215	37	17

G. Farm Indebtedness

A seventh and final hypothesis was made that farm operators would more likely have considered leaving the farm when the farm was debt-free or had little debt, than when a debt load was carried.

Table 11. Percentage of Farms Which Were Debt Free in Relation to the Consideration of Operators to Leave This Farm or Not to Leave

Percent Debt Free	Had Considered Moving		Had Not Considered Moving	
	Percent	No.	Percent	No.
0	8	3	1	2
1-50	11	4	12	26
51-99	36	13	31	68
100	42	15	44	95
No answer	3	1	12	26
Total	100	36	100	217

The distribution of farm operators by the extent of their debt load bears no significant relationship to whether they have or have not considered leaving.

Conclusions

Interviews with farm operators were classified into two groups, (a) those who had considered leaving their present farm for non-farm work or farming elsewhere and (b) those who had never considered leaving their present location. The hypotheses tested were those suggested from generally accepted measures of average differences among aggregates of movers and non-movers.

Analysis of the data revealed that of the seven hypotheses studies, there was not one which significantly differentiated the group who had never contemplated leaving their farms from those who had considered leaving.

Some explanation of why none of these hypotheses were supported may be found in the fact that large proportions of the incomes received were derived from non-farm employment. Therefore, their decisions as farmers in relation to farm operations would be tempered more with non-farm factors than if they were dependent entirely on the farm income for their living. The characteristics of the operators are sufficiently similar in the two groups that we cannot conclude from the present analysis that any one or group of these factors is responsible for creating a desire to move or to awaken consideration for moving.

One could assume that the value of the farm as a residence or as a place to raise children enters into considerations to stay, provided certain minimum income standards are met. One could further assume that the majority of the farmers interviewed, as a sample of larger numbers in the state, just enjoy living in their particular locations. Yet we know from census counts that the number of operating farms is declining. Much of this decline may be found in the change from full-time to part-time or non-farm rural residence classification.

Whatever the cause of the migration of the families that do move, this study of the attitudes of present farm operators in New Hampshire did not disclose any economic or non-economic factors basic to these decisions. Such factors have not been isolated by the combined efforts of the social sciences. The existence of disparities in the variables most frequently analyzed such as income, age, or education is not sufficient explanation for migration from New Hampshire farms.

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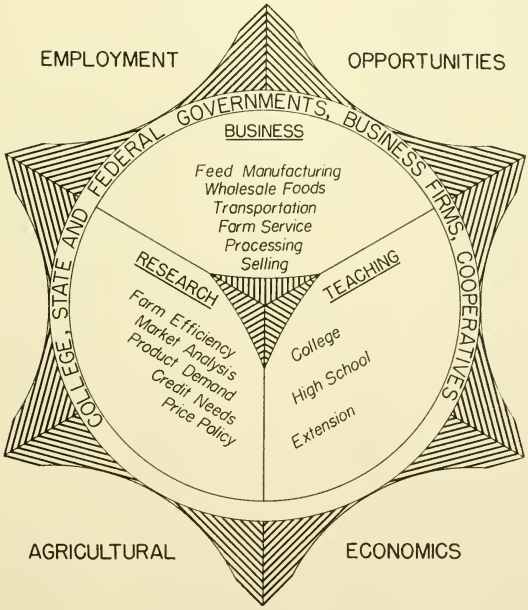

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